

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/531,244	04/14/2005	Kesatoshi Takeuchi	9319T-001125/NP	6485	
27572	7590 11/09/2006		EXAM	EXAMINER	
HARNESS, DICKEY & PIERCE, P.L.C.			MASIH, KAREN		
P.O. BOX 828	B D HILLS, MI 48303		ART UNIT	PAPER NUMBER	
DECOM IEE	5 111225, W. 10303		2837		
	•	•	DATE MAILED: 11/09/200	6	

Please find below and/or attached an Office communication concerning this application or proceeding.

		A markly and the second	Annthonytta				
Office Action Summany		Application No.	Applicant(s)				
		10/531,244	TAKEUCHI, KESATOS	HI			
	Office Action Summary	Examiner	Art Unit				
		Karen Masih	2837				
Period fo	The MAILING DATE of this communication app or Reply	ears on the cover sheet with the c	orrespondence address	S			
WHIC - Exte after - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DATE of time may be available under the provisions of 37 CFR 1.1: SIX (6) MONTHS from the mailing date of this communication. Operiod for reply is specified above, the maximum statutory period we are to reply within the set or extended period for reply will, by statute reply received by the Office later than three months after the mailing ed patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim vill apply and will expire SIX (6) MONTHS from , cause the application to become ABANDONE	N. nely filed the mailing date of this commun D (35 U.S.C. § 133).				
Status							
1)	Responsive to communication(s) filed on						
•		action is non-final.					
	Since this application is in condition for allowar		secution as to the mer	its is			
-,_	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposit	on of Claims						
4)🛛	Claim(s) <u>1-19</u> is/are pending in the application.						
·	4a) Of the above claim(s) is/are withdrawn from consideration.						
	Claim(s) is/are allowed.						
	Claim(s) <u>1-19</u> is/are rejected.						
-	Claim(s) is/are objected to.						
	Claim(s) are subject to restriction and/or	r election requirement.					
	on Papers	·					
_	•						
9) The specification is objected to by the Examiner.							
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
	ınder 35 U.S.C. § 119	arminor. Note the attached Office	7.00.011 01 101111 10 10	'			
_	•	minite and a 25 H O O C 440(a)	(4) (5)				
	Acknowledgment is made of a claim for foreign	priority under 35 U.S.C. § 119(a)	-(a) or (t).				
a)[a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 						
	3. Copies of the certified copies of the prior	• •		•			
	application from the International Bureau	·	u III tilis Ivational Stage	5			
* 5	see the attached detailed Office action for a list	, , ,	d <i>V . M</i>	0			
		or the continue copies not recent	Karen Ma Primary Exa	sih miner			
Attachmen	t(s)						
1) 🛛 Notic	e of References Cited (PTO-892)	4) Interview Summary	(PTO-413)				
	e of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Da	te				
	nation Disclosure Statement(s) (PTO/SB/08) r No(s)/Mail Date <u>4/14/05</u> .	5) Notice of Informal Page 6) Other:	atent Application				
		·/ — - · · · · · · · · · · · · · · · · · ·					

Application/Control Number: 10/531,244 Page 2

Art Unit: 2837

1. Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims 1-3,5-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kiyota in view of DE 3800476 as cited by applicant and Komiya.

Kiyota discloses rotation control circuit of motor comprising pwm control circuit of motor, rotational speed sensor of motor, reference signal generation circuit; phase comparing circuit and divider for dividing detected rotational speed signal of motor wherein phase difference between signal from divider and signal based on reference signal is sought with said phase comparing unit and phase difference signal is supplied to said pwm control circuit, see fig 1 #11,23,13,16,22. Kiyota lacks disclosing posture control for vehicle body and plural motors. DE 3800476 discloses posture control for vehicle body; see abstract and col 3 lines 11-col 5 lines 35 and figs 1-5. Komiya discloses plural

motors, see fig 1. It would have been obvious to one of ordinary skill in the art to combine the rotation control of Kiyota with posture control of DE 3800476 and plural motors of Komiya for improved control.

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Komiya discloses rotation control circuit of motor, rotation command signal output means to said motor; reference signal generation circuit, phase comparing circuit and divider for dividing command signal to motor; wherein phase difference between signal form said divider and signal based on said reference signal is sought with phase comparing unit and phase difference signal supplied to pwm control circuit, see fig 1 #1,2,4,5,7.

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kawagosh and Sunaga et al disclose rotation control circuit of motor with pwm and phase difference.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karen Masih whose telephone number is 571-272-2068. The examiner can normally be reached on m-f 8.30-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lincoln Donovan can be reached on 571-272-2837. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2837

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Karen Masih Primary Examiner Art Unit 2837

KM